

THE EFFECTIVENESS OF MEDIA INTERACTIVE MULTIMEDIA ON ELECTRONIC CONTROL SYSTEM COURSE IN THE SMK NEGERI 2 SRAGEN

By
S u b o n o
NIM. 09501247001

ABSTRACT

This study aims to determine: (1) the improvement of students' achievement in learning using interactive multimedia lesson on Electronic Control System, and (2) The effectiveness of the use of interactive multimedia instructional media on the subjects of electronic control systems.

This study used an experimental method. The population was all students of XI class Skill Competency of Electric Power Installation Engineering in SMK Negeri 2 Sragen while the number of samples this study as many as 60 students class XI. The number of samples was made of two groups consisting of experimental and control groups each of 30 students. The experimental group was using interactive multimedia, while a control group of conventional learning. Data collection techniques were using tests and questionnaires. Data analysis methods were using descriptive analysis, then continued with prerequisite analysis and testing of the average difference (t test).

Results of research on students of SMK Negeri 2 Sragen show that: (1) the results of the cognitive aspects by using interactive multimedia mean value (82.17), whereas the conventional media the average value (68.33). The use of interactive multimedia was better than the conventional media in improving the cognitive aspects, ($t = 5.477$, $p = 0.000$). (2) The results of studying on the affective aspects of the use of interactive multimedia mean value (82.32), whereas the conventional media (74.12). The use of interactive multimedia was better than the conventional media in improving affective aspects, ($t = 5.477$, $p = 0.000$). Learning using interactive multimedia was more effective than the conventional media. This proved for the cognitive aspects of $t(5.477) > t_{0.05(58)} = 1.671$ and P-value (0.000) < 0.05 , t affective aspect (5.961) $> t_{0.05(58)} = 1.671$ and P-value (0.000) < 0.05 . Interactive multimedia advantages compared to conventional media, which is able to improve student learning motivation and attention so that students are more active in the learning process. The impact was the students' achievement increased. Based on these advantages, it can be taken into consideration teachers to use interactive multimedia and gradually abandoned the conventional learning.

Keywords: Interactive Multimedia, Conventional and Electronic Control Systems Learning Outcomes